1. (3pt) Find all solutions to $x^2 + 3x - 10 = 0$ and round to two decimal places.

2. Let $f(x) = \frac{4}{15} x + \frac{1}{5}$, let $g(x) = 3 + e^{-2x}$, and let $h(x) = 4 \ln(3x - 1) - 2$.

   (a) (2pt) Find all values of $x$ such that $f(x) = \frac{2}{3}$ and leave your answer in exact form.

   (b) (2pt) Find the $y$-intercept of $y = g(x)$ and leave your answer in exact form.

   (c) (3pt) Find any $x$-intercepts of $y = h(x)$ and round to two decimal places.
3. Suppose that $F$ is some function such that $F(4) = 6$ and suppose that $G$ is some function such that $G(4) = -2$.
   (a) (1pt) Compute $(F - G)(4)$.
   (b) (1pt) Compute $(F/G)(4)$.

4. Let $f(x) = 3x - 4$ and let $g(x) = -x + 3$.
   (a) (3pt) Find and simplify $(f + g)(x)$.
   (b) (3pt) Find and simplify $(fg)(x)$.

5. (2pt) Each of the three plots below shows the graph of $y = f(x)$ and $y = g(x)$ but only one of them shows the correct graph of $y = (f + g)(x)$. Circle that plot. Note that the dashed lines are not meant to express segmentation of the graph but rather to provide visual contrast between the three graphs.